



A Rock Inlet Sediment Trap Type B (RIST-B) is a small 'doughnut-shaped' stone dam device constructed around a drop inlet structure. The RIST-B should be used at drop inlets where an RIST-A would be unsafe due to adjacent traffic flow and/or where flow velocities are too large for an RIST-C. The RIST-B utilizes class A stone lined with sediment control stone to detain sediment-laden water and settle the sediment particles, preventing them from entering the drop inlet. The RIST-B can be modified to accommodate a drop inlet receiving water from only one direction. A silt basin can be constructed adjacent to the device to increase the sediment storage capacity when the drop inlet is in a ditch location.

AREAS OF USE:

- At drop inlets that receive moderate to heavy flow from one or more than one direction.
- At locations where an RIST-A would be unsafe due to adjacent traffic.
- Around catch basins in curb and gutter sections.

DESIGN CRITERIA:

- If the drainage area exceeds 1 acre, then a Silt Basin B is needed in conjunction with the RIST-B.
- The stone dam should be a minimum of 1.5 feet high.
- The top elevation of the RIST-B shall be a minimum of 12 inches lower than the ground elevation downslope from the inlet.

CONSTRUCTION SPECIFICATIONS:

- Class A stone installed in a 'doughnut-shaped' ring around the inlet, with a 1-foot wide berm on the top and a height of 1.5 feet.
- There should be 1.5 feet from the inside edge of the stone dam and the edge of the inlet.
- Sediment control stone installed on the outer face of the stone dam in a layer 1-foot thick.
- The top of the berm shall be a minimum of 1 foot below the shoulder or any diversion point.

MATERIAL SPECIFICATIONS:

- Structural stone shall be class A stone that meets the requirements of Section 1042 of the Standard Specifications for Stone for Erosion Control, Class A.
- Sediment control stone shall be #5 or #57 stone that meets the requirements of Section 1005 of the Standard Specifications for these stone sizes.

PAYMENT:

- Installation of measure:
Stone for Erosion Control, Class A
Sediment Control Stone
- Silt cleanout of device:
Silt Excavation

Ton
Ton

Cubic Yard

**MAINTENANCE:**

- Inspect the device after each significant rainfall event for damage and sediment accumulation, to insure the device is functioning properly.
- Remove sediment from the device when accumulations reach one-half of the storage capacity formed by the device.
- Replace or clean the sediment control stone as needed to allow water to drain through the device between rainfall events.
- Rebuild and/or repair the device when it is damaged.

TYPICAL PROBLEMS:

- Sediment accumulations are not removed in a timely fashion, causing sediment to be released into the storm drain system.
- Sediment control stone is not cleaned and becomes clogged, preventing proper drainage.
- The device is not rebuilt or repaired when storms, equipment, etc damage it.
- The device is not built wide enough to prevent water from washing around the device. Water should always flow through or over the device, not around.